

AMENDMENTS TO THE CLAIMS

1. (Original) A method for changing control of a processor that is in an active state under the control of an operating system to a borrowed state wherein the processor is under control of firmware, comprising:

sending a request for a change in control to the operating system;

deciding, by the operating system, whether to grant the request;

placing the processor in a transitional state that is different from the active state, if the request is granted; and

sending, by the operating system, an interrupt signal to move the processor from the transitional state into the borrowed state.

2. (Original) The method of claim 1, further comprising:

maintaining the processor in the active state, if the request is denied.

3. (Original) The method of claim 2, further comprising:

re-sending the request, if the request is denied.

4. (Original) The method of claim 1, further comprising:

operating the processor in the borrowed state until completion of a task;

placing the processor in another transitional state; and

returning the processor to the active state.

5. (Original) The method of claim 4, wherein the task is handling a problem that cannot be handled by the operating system.

6. (Original) The method of claim 1, wherein the processor is one processor of a plurality of processors.

7. (Original) The method of claim 6, wherein the request specifies the processor.

8. (Original) The method of claim 1, wherein a duration of the borrowed state is unbounded.

9. (Original) The method of claim 1, wherein the request is an notify command referencing the processor.
10. (Original) The method of claim 1, further comprising:
invoking the request by one of the firmware and an application.
11. (Original) The method of claim 1, further comprising:
using a general purpose event to cause formation of the request.
12. (Original) The method of claim 1, further comprising:
placing the operating system into hibernation while the processor is in the borrowed state.
13. (Currently Amended) The method of claim 1, wherein the processor is an [[Itanium]] ITANIUM Processor Family chip, and the firmware is system abstraction layer firmware.
14. (Original) The method of claim 1, wherein the deciding comprises:
deciding, by the operating system without involvement of the firmware, whether to grant the request.
15. (Original) A computer system comprising:
a processor for executing code;
an operating system that has control of the processor during an active state; and
a firmware layer that has control of the processor during a borrowed state;
wherein the operating system decides whether to place the processor in the borrowed state and sends an interrupt signal to move the processor into the borrowed state.
16. (Original) The system of claim 15, wherein if the operating system decides not to place the processor in the borrowed state, the operating system maintains control of the processor.

17. (Original) The system of claim 15, wherein the firmware maintains control of the processor in the borrowed state until completion of a task, and then returns control of the processor to the operating system.

18. (Original) The system of claim 17, wherein the task involves a problem that cannot be handled by the operating system.

19. (Original) The system of claim 15, wherein the processor is one processor of a plurality of processors.

20. (Original) The system of claim 15, further comprising:
a requesting entity invokes a request that the processor be placed in the borrowed state.

21. (Original) The system of claim 20, wherein the processor is one processor of a plurality of processors and the request specifies the processor.

22. (Original) The system of claim 20, wherein the request is an notify command referencing the processor.

23. (Original) The system of claim 20, wherein the requesting entity is one of:
the firmware, an application, and platform hardware.

24. (Original) The system of claim 20, wherein a general purpose event is used to cause formation of the request.

25. (Original) The system of claim 15, wherein a duration of the borrowed state is unbounded.

26. (Original) The system of claim 15, wherein the operating system is placed into hibernation while the processor is in the borrowed state.

27. (Currently Amended) The system of claim 15, wherein the processor is an [[Itanium]] ITANIUM Processor Family chip, and the firmware is system abstraction layer firmware.

28. (Original) The system of claim 15, wherein the operating system decides without involvement of the firmware whether to place the processor in the borrowed state.

29. (Original) The system of claim 15, wherein the operating system acts as a proxy to deliver a message to the firmware layer.

30. (Original) The system of claim 15, wherein a modification of the firmware does not require a modification to the operating system.

31. (Original) A computer system that has a processor for executing code, an operating system that has control of the processor during an active state; and a firmware layer that has control of the processor during a borrowed state, the system comprising:

means for forming a request to change control of the processor from the active state to a borrowed state;

means, operative by the operating system, for deciding whether to grant the request;

means for moving the processor from the active state to the borrowed state.

32. (Original) The computer system of claim 31, further comprising:

means for returning the processor to the active state upon completion of a task.

33. (Original) A computer readable medium having computer program logic recorded thereon for changing control of a processor that is in an active state under the control of an operating system to a borrowed state wherein the processor is under control of firmware, comprising:

logic for forming a request for a change in control to the operating system;

logic for deciding, by the operating system, whether to grant the request;

logic for placing the processor in a transitional state that is different from the active state, if the request is granted; and

logic for moving the processor from the transitional state into the borrowed state.

34. (Original) The computer system of claim 33, further comprising:

logic for returning the processor to the active state upon completion of a task.